

**69-14 iBond (Project 02-42) (06/03)**

Until recently, one of the major disadvantages of popular bonding agents was the complexity involved in their multi-step application process. iBond is a new bonding agent that features unit-dose packaging combined with one of the more direct and faster application techniques of currently-marketed products. The product combines the etchant, primer, and adhesive into one component. But, unlike other "all-in-one" adhesives, iBond requires no mixing, and represents a new step in packaging and application. iBond is an unfilled mixture of UDMA, 4-META, and camphoroquinone dissolved in acetone and water. The bonding agent is not to be used on uncut enamel or with chemical-curing resin composite materials. All self-etching products have a very acidic pH and many will inactivate the self-curing chemistry of the cement or restorative product. iBond is reportedly suitable for bonding composites, compomers, amalgam or porcelain and is available from Heraeus Kulzer in unit-dose capsules or a single 4-mL bottle.



**Manufacturer:**

Heraeus Kulzer, Inc  
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(800) 431-1784  
(914) 273-8600  
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[www.Heraeus-Kulzer-US.com](http://www.Heraeus-Kulzer-US.com)

**Suggested Retail Price:**

\$130.00 iBond Single-Dose Assortment (item number 66008944) includes:

- 40 0.2-mL unit-dose containers of iBond
- 50 microbrushes

\$100.00 iBond Bottle Assortment (item number 66008943) includes:

- 4-mL container of iBond
- 50 microbrushes
- application wells

**Government Price:**

\$70.20 iBond (item number 66008944 as listed above)  
\$54.00 iBond (item number 66008943 as listed above)

**ADVANTAGES:**

- + Requires few steps for application.
- + Is fast to apply with no mixing.
- + No separate etching step is required by instructions.
- + Can be applied to dried tooth structure, which helps standardize application procedure.
- + No reports of post-placement sensitivity.
- + Application process is shown pictorially on laminated card.
- + Recommended storage conditions are provided on instruction sheet and box.
- + Packaged in a small, space-saving box.
- + Packaged in unit-dose capsules.
- + Competitively priced.
- + Expiration dates and lot numbers are stamped on individual components.

**DISADVANTAGES:**

- Dentin shear-bond strength was among the lowest of bonding products yet evaluated by DIS.
- Is not effective on uncut enamel.
- Is incompatible with chemical-activated materials.
- No clinical studies yet available.
- Some patients may object to the product's odor.
- Sclerotic dentin requires separate 30-second phosphoric-acid etch.
- No Material Safety Data Sheet (MSDS) provided with product.

**SUMMARY AND CONCLUSIONS:**

iBond is an innovative, unit-dose bonding product that is extremely quick to apply and easy to use. Its unit-dose packaging enhances infection control, prevents evaporation of the bonding agents, and makes clean-up easy. Unfortunately, the product has several important disadvantages. iBond's chief disadvantage is its low bond strength: the value was among the lowest of the bonding products yet tested by DIS. Equally problematic is that iBond has limited clinical applications. For example, it can only be used with light-activated materials or dual-activated materials that are adequately cured. Also, because it is incompatible with chemical-activated materials, it can not be used as a dentin/enamel pretreatment prior to luting restorations with chemical-activated resin cements. **iBond** is rated **Marginal** for use by the federal dental services.